Will Fracking Come to Western North Carolina?  
Time to Take Action!

By Louis A. Zeller

In June the North Carolina Gov. McCrory signed the so-called Energy Modernization Act (Session Law 2014-4), opening the state to the invasive method of extracting natural gas known as “fracking.” While most of the focus on fracking has centered on the state’s shale basin—extending along an arc through Stokes, Chatham, Lee and Anson counties (see map)—the state legislature has proposed $550,000 for geologic testing to find natural gas in the mountains of western North Carolina. According to the Department of Environment and Natural Resources, the counties targeted for such tests are Cherokee, Clay, Graham, Haywood, Jackson, Macon and Swain. 1

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1 “State to test for natural gas deposits in WNC,” Asheville Citizen, June 2, 2014

County Ordinance Power Survives 2014 Legislation

On June 4, 2014 North Carolina’s Governor signed Ratified Bill S786, the so-called “Energy Modernization Act,” promoting oil and gas exploration and extraction known as hydraulic fracturing, or fracking. The new law includes a section which many believe stops local governments from enacting ordinances on fracking. However, although the law does bar local governments from banning fracking, they may still enact protective ordinances which do not prohibit it outright. North Carolina law grants authority to all counties the power to adopt ordinances, known as the counties’ police power. S786 alters but does not end this power.

At last count, 25 county and city governments in North Carolina have passed moratoriums, resolutions or ordinances restricting certain aspects of fracking. Also, in Virginia at least 9 local governments have enacted similar measures, and across the nation many more have done so. To find out what the new North Carolina law does and does not do, see the full analysis on the BREDL website at http://www.bredl.org/pdf4/Fact_sheet_on_local_ordinances_Ratified_S786_NCGA_2014.pdf
BREDL Executive Committee Board Members Through the Years

Since its founding on March 15, 1984, BREDL’s Board of Directors has had scores of dedicated members who donated their time and effort in service to the organization. Within the board, the Executive Committee has special responsibility. It has evolved over the years but has always reflected the diversity and unity of the Blue Ridge Environmental Defense League, our greatest strengths. Members of the executive committee are listed below chronologically, with the dates that they joined. Some have continued to serve for many years, providing continuity, wisdom and the invaluable benefit of experience. Without them, we would not be who we are today.

Thank you.

1984: Bernard Goss, Janet Marsh, Linda Taylor, Truiett Weaver, Patty Wheeler, Lynn Worth, Bill Mock, Bettie Pendergraft, Bill Francis, Catherine Dungan, Joan Mock, Marea Weaver, and Michael Dungan

1986: Perry Struss, Virginia McLeod

1989: Elmer Hall

1992: Tony Napoli, Susan Sharpe, Rick Maas, Mike Arnold

1993: Tom Mathis, Marion Wallin, Ann Evans, Richard Crowe

1994: James A. Johnson, Sam Tesh, Marion Wallin, Pam Jopson, Carol Bradley-West, Jean Colston, Claude Ward, Fred Dye

1995: Betty Tesh, Marge Cahill, Regina Tatum

2000: Mark Barker

2004: Elizabeth O’Nan, Daisy O’Nan

2009: Pat Hill

2010: Sandy Kurtz

2012: Rev. Willie Tomlin

Janet Marsh, Strategic Advisor

BREDL Staff Members Through the Years

In 1986, the League hired its first paid staff. Our practice has been the hiring of people already working as volunteers in their own communities. Almost all have been community organizers, learning the craft by doing. The following staff members have worked for BREDL through the decades, contributing their strengths, talents, energy, and abilities to each campaign. The list indicates the beginning of their respective employment periods and their office locations.

1986: Janet Marsh, Pat Fournier, Glendale Springs NC

1986: Sandy Adair, Boone NC; Virginia Hunt, Spruce Pine NC; Bob Gessner, Mars Hill NC; Lou Zeller, Marshall NC

1988: Ginny Lindsay, Jefferson NC

1990: Denise Lee, Wadesboro NC

1992: Therese Vick, Rich Square NC

1994: Carol Bradley-West, Cherokee NC

1997: Claude Ward, Burgaw NC

2000: Don Moniak, Columbia SC; Catherine Mitchell, Charlotte NC

2001: David Mickey, Winston-Salem NC

2002: Charles Utley, Augusta GA

2003: Bonnie Ward, Burgaw NC

2007: Sue Dayton, Saxapahaw NC

2009: Ann Rogers, Roanoke VA

2009: Beverly Kerr, Graham NC

2011: Therese Vick, Raleigh NC

2013: Kate Dunnagan, Greensboro NC

2013: Cary Rodgers, Peachland NC
On April 26, 2014, the BREDL Board of Directors held a special celebration at its spring meeting. The League recognized the work and perseverance of its volunteers, members, and leadership with an awards ceremony, reception, video premier, and online tour of the anniversary archives, in honor of thirty years of environmental stewardship and commitment to advancing environmental democracy. It was an honor to celebrate this momentous occasion with people who have come together across many states to stand united in our vision, values, and history of working together for justice and sustainability by protecting the public, the environment, and our communities.

At the celebration in April, the League presented awards to five of BREDL’s longest standing members and staff. Both Co-Presidents, James Johnson and Sam Tesh, were given an Award for Excellence in Leadership in recognition of more than twenty years of service. Webmaster and Virginia Vice-President, Mark Barker, who organized and built the League’s online anniversary archives, was presented with an Outstanding Service Award in recognition of excellence in project and website management. Mark also demonstrated a tour of the archives that are available on the interactive timeline on BREDL’s website at http://bredl.org/bredl30/index.htm.

Ten short video interviews of BREDL members, organizers, volunteers, and staff were premiered at the meeting and are now available online at http://bredl.org/bredl30/reflections.htm. The videos, produced by staff member Cary Rodgers, feature first-hand accounts and highlights of BREDL campaigns, from the low-level nuclear waste dump site in Richmond County, NC, to fighting nuclear power companies, hazardous waste and biomass incinerators in their own backyard. An important part of celebrating the thirtieth anniversary is capturing these stories and recording them for the communities and activists who will carry BREDL’s mission into the future. This year, we are collecting materials, stories, and interviews for the thirtieth anniversary archives. If you would like to submit a story, pictures, or artifact about your BREDL chapter, contact KateDunnagan@gmail.com.

In March of 1984, fifty merchants and homemakers, farmers and teachers met at the Mission House of the Holy Trinity Church to organize the Blue Ridge Environmental Defense League against the threat of a high level nuclear waste dump to be built by the Department of Energy in the Southern Appalachian mountains. Thirty years and hundreds of victories later, we stand together across the Southeast to celebrate the history of the League, its dedicated members, and all of their accomplishments.

The League was built by visionaries and its work continues, thanks to the dedication and commitment of many who have seen and felt the threats of exploitation posed by polluting industries in their communities. Our commitment to this work will last as long as it is needed, and is made possible by our volunteers and donors. A tax-deductible donation in honor of our thirtieth anniversary can be made at www.BREDL.org. T-shirts, bags, coffee mugs and other merchandise with the 30th anniversary logo are also available on our website. Thank you for supporting BREDL!
Twenty years ago President Clinton signed the Executive Order on environmental justice: “Federal Actions to Address Environmental Injustice in Minority Populations and Low-income Populations.” The executive order was the result of a great effort by activists, academics and religious leaders, an example of nationwide, community-level cooperation at its best. Speaking about the push to get the Order signed, Rev. Charles Utley said:

“I can clearly remember that day in Washington, DC, when we finished the proposal to present to President Clinton. It all came down to the Power of the Pen, after hours of drafting and redrafting the language, it all came down to the President when he placed his signature on Executive Order 12898. This was an historical moment captured in time that has helped changed the course of history in our fight for Environmental Justice through the ‘Power of the Pen.’”

Fifty year ago, the Civil Rights Act advanced the cause of justice by outlawing discrimination, and later, disparate impacts. Both the Act and the Order flowed from a line of thought inherent in the nation’s founding and spelled out in the Declaration of Independence, that in order to secure fundamental rights state authority is instituted, altered, or even abolished by the governed. And the principles upon which the People organize are those most able to “effect their safety and happiness.”

Like the Declaration, and the nation itself, the Executive Order is a work in progress, promising much which has yet to be delivered. In his retrospective on the Order, Dr. Robert Bullard pointed to this unfinished business: “[The EPA] is required to protect all Americans, not just individuals or communities who have money to hire lawyers, lobbyists, scientists, and experts.”

Lacking resources to hire experts, some resort to making appeals to government staff. This is most often disappointing because for them to do the right thing can be costly. A grassroots leader, Suzie Canales, Executive Director of the Citizens for Environmental Justice in Corpus Christi, Texas, said,

“I have witnessed heartless and clueless representatives of federal agencies visit hardcore EJ communities and board their plane back to DC untouched, unmoved and, despite numerous attempts on our part, were never heard from again. I have witnessed good people at federal agencies that wanted to truly help. But, before they could do anything significant they were removed from their position, or lost their job.”

Reflecting on the Executive Order’s 20-year milestone, Tom Goldtooth, Executive Director of the Indigenous Environmental Network in Minnesota, said,

“The next twenty years, we must link social and environmental struggles, bring together rural and urban communities, and combine local and global initiatives so that we can unite together in a common struggle. We must use all diverse forms of resistance. We must build a movement that is based on the daily life of people that guarantees democracy at all stages of societies.”

Juan Parras, Executive Director of Texas Environmental Justice Advocacy Services in Houston, Texas, expanded on this, saying,

“It is often a battle of divine hope and intervention from above that keeps the struggle alive. Environmental Justice communities deserve a level playing field for the insurmountable obstacles facing their daily lives.”
The thirty year history of the Blue Ridge Environmental Defense League brackets the Executive Order. Before the Order, the US Department of Energy’s top twelve site for the nation’s nuclear power plant waste included hardscrabble Madison County in Appalachia with a per capita income 48% below state average. North Carolina tried 22 times to site a hazardous waste incinerator before ending up in Northampton County with a 58% African-American population and 26% below poverty level overall. And the infamous Epley Report deliberately sought an economically distressed community, tallying tar-paper shacks and single-wide trailers, for an 8-state radioactive waste dump.

Since the Order, Georgia Power picked Plant Vogtle in majority black Burke County, where 31% of the population is below poverty level, for the first nuclear power expansion in three decades. Today Duke Energy dredges up its spilled toxic coal ash from the Dan River and carts it to the Person County landfill despite local opposition and a per capita income 15% below the state average.

The unequal distribution of pollution impacts is an injustice because the burden is placed overwhelmingly on low income and minority communities. Whether by disinterest or design, the siting of waste dumps, belching smokestacks and toxic sludge in poor and minority communities—that is, places with less political power—is unfair, unjust and, under the Civil Rights Act, illegal.

Power is the inescapable factor in environmental justice issues: Power of the people, power of the purse, power of the spirit and power of the pen. For the 21st Century, I would revise Frederick Douglass’ words on freedom as follows:

Those who seek environmental justice and yet depreciate agitation, are people who want crops without ploughing the ground; they want rain without thunder and lightning; they want the ocean without the roar of its many waters. Power concedes nothing without a demand. It never did and it never will.


The geology of western North Carolina, the Blue Ridge Belt, is largely metamorphic rock, formed by extreme heat and pressure when the Appalachian Mountains were formed. Such formations are not generally thought to contain oil or gas. However, a geologic area known as the Great Smoky Mountains Group contains significant organic-rich formations which point to natural gas deposits. Unknown at present is how much and how deep potential gas deposits may be. Documents obtained by the Blue Ridge Environmental Defense League indicate that some geologists have been aware of the potential for natural gas in western North Carolina since 2008. A report entitled “Reasonably Forseeable Development Scenario for Fluid Materials” for North Carolina published by the US Department of the Interior’s Bureau of Land Management states, “Seismic surveys in the Blue Ridge suggest that sedimentary rocks may be present deep beneath the crystalline rocks. These may be similar to oil- and gas-bearing strata in the Valley and Ridge Province of Virginia and West Virginia. Detailed studies have not been conducted to verify the seismic surveys (Taylor, 2008).”

In other words, under the metamorphic crystalline rock of western North Carolina, there appears to be sedimentary rock. Sedimentary rock is where oil and natural gas are found.

Public Lands at Risk

There are four national forests in North Carolina: Pisgah, Nantahala, Uwharrie and Croatan. Together they cover nearly 2,000 square miles from the mountains to the sea. Much of western North Carolina is National Forest land. Nantahala National Forest is the largest of the four, 830 square miles in the six counties of Macon, Graham, Cherokee, Jackson, Clay, and Swain. Pisgah National Forest covers 801 square miles in the twelve counties of Transylvania, McDowell, Haywood, Madison, Caldwell, Burke, Yancey, Buncombe, Avery, Mitchell, Henderson, and Watauga.

Nationwide, five million acres of National Forest Service lands are currently leased for oil, gas, coal, and phosphate mining operations. At any given time, the Forest Service administers operations on approximately 160,000 mining claims and manages approximately 2,600 mineral material sale contracts. In the 1970s, nearly all eastern US national forest lands were leased for gas and oil drilling. Today, fracking is underway in our national forests. Allegheny National Forest in Pennsylvania has 12,000 gas and oil wells. Talladega National Forest in Alabama has plans to lease 43,000 acres for gas drilling. Monongahela National Forest in West Virginia is also open to drilling.

On March 11, 2014 the supervisor for North Carolina’s national forests announced the upcoming revision of the Nantahala and Pisgah land management plan. In a scoping letter addressing the need for revision, Forest Supervisor Kristin Bail said, “No decision regarding oil and gas leasing availability will be made, though standards will be brought forward and developed that would serve as mitigations should an availability decision be necessary in the future.” In March the Forest Service’s planning document stated, “There is a need to update plan direction to address potential commercial oil, gas, and hardrock mineral exploration and uses,” and three months later an update said, “There is a need to coordinate with the USDI Bureau of Land Management and update plan direction to address potential commercial oil, gas, and hardrock mineral leases, taking into account other compatible and incompatible multiple use objectives and desired conditions.” This summer the Forest Service is holding a series of meetings to gather public input on proposed changes to the plan. People should attend these meetings and voice their concerns.
What Others Are Doing to Halt Fracking

Some local governments are taking action to protect their residents from the impacts of fracking. In June, Arlington County, Virginia approved a resolution calling upon the US Forest Service to “prohibit the use of horizontal fracturing in the George Washington National Forest.” The county government cited the need to protect the headwaters of its public water supply. The resolution also points to the fracking industry’s many exemptions from environmental laws, including the Safe Drinking Water Act and the Clean Water Act. The resolution was directed to the US Forest Service during the revision of the George Washington National Forest Land and Resource Management Plan.

Local Governments Need to Act

In western North Carolina the impacts of fracking would be no less dangerous than those cited by Arlington’s county officials. In addition to watershed contamination, ozone pollution from gas fields has caused air pollution problem similar to that found in large cities. And the pollution can affect an area of up to 200 miles from the region where the gas is being extracted. Hundreds of products containing more than 750 chemicals and components are used in the fracking process, including more than 100 known or suspected endocrine-disrupting chemicals. Exploration and Production Waste (E&P) is a broad category of compounds generated by the exploration and production of oil and gas. Although E&P wastes contain toxic chemicals and can be radioactive, they can be disposed of in a county’s municipal solid waste landfill. The oil and gas industry can claim trade secret protection for fracking chemicals that will be transported across North Carolina highways and byways, and used on site. Local governments will have no right to know what chemicals are being used in a fracking job. The fracking law the governor signed into law in June makes it a crime for state officials, first responders, and medical providers to disclose trade secrets to others, and even among themselves. In addition to legal loopholes for water pollution, the oil and gas industry’s exemptions from major environmental laws include the Clean Air Act, the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act, the National Environmental Policy Act, and the Toxic Release Inventory of the Emergency Planning and Community Right-to-Know Act.

Local governments in North Carolina should take a page from the Arlington County playbook and call for a prohibition of fracking on all national forest lands.
In February 2014, a pipe under the coal ash pit at Duke Energy’s Dan River Station burst, releasing up to 39,000 tons of toxic sludge into the Dan River. Almost immediately, some environmental organizations and elected officials began calling for removal of the coal ash from the 14 sites in the state as well as the Dan River spill. Blue Ridge Environmental Defense League recognized the inappropriateness of landfilling coal ash, and the terrible injustice of taking Duke’s problem to someone else’s back yard. Governor Pat McCrory, legislators on both sides of the aisle and environmental leaders have mentioned landfilling as an appropriate choice for the disposition of at least some of the ash. This plays right into Duke Energy’s hands, as we saw evidenced in Person County. (See sidebar)

It is well known and understood that all landfills leak, that groundwater monitoring wells are not numerous enough or close enough together to capture contamination before it becomes widespread, and that closure cost estimates are ridiculously low; which will undoubtedly leave local governments holding the bag for millions of dollars in clean-up costs. However, the landfilling of coal ash is particularly problematic. A 2011 report presented at the “World of Coal Ash” conference in Colorado Springs outlines the unique problems of landfill disposal of coal ash and the differences between coal ash and municipal solid waste (MSW). Municipal solid waste landfill liner systems are not designed or able to handle coal ash.

Differences Between Coal Ash and Municipal Solid Waste

Particle Size
* Coal ash has a very fine, generally uniform particle size.
* Municipal solid waste has a fairly large and heterogenic particle size.

Susceptibility to Erosion and Moisture
* Because coal ash is silt-size, it is very susceptible to erosion.
* Coal ash can lose structural strength rapidly if exposed to moisture and not compacted quickly, which exacerbates erosion.
* MSW can typically absorb large amounts of moisture, coal ash cannot.
* MSW is not very susceptible to erosion.

Particulate Air Emissions
* Coal ash can dry rapidly which leads to fine, blowing dust- this is a health hazard and almost impossible to control.

MSW does not usually dry as fast as coal ash, typical problems are from waste blowing off the working face of the landfill into streams, ditches, and backyards.

Toxic Coal Ash is not Compatible with a Community’s Garbage

* Coal ash is a hazardous waste, and can have high concentrations of toxins such as arsenic, selenium, mercury- even radioactive isotopes

Problems

Water ponding and catchment
* Loose and compacted coal ash reduces leachate infiltration rates and allows water to pond in the landfill which impacts the ability of the leachate collection system to function properly and to reduced storage capacity in the landfill. If leachate collection pipes clog up and leachate remains in the landfill, fluids can build up. The resulting liquid pressure becomes the main force driving waste out the bottom of the landfill when the bottom liner fails.

* Because coal ash is a silt sized particle, stormwater runoff and sediment control basins will likely fill more quickly and will require more maintenance.
Blowing Ash

- Because of its fine consistency, coal ash is highly mobile and can be deposited on yards, homes, and bodies of water outside the landfill.
- The surface of coal ash dries quickly, sometimes in a few hours, which makes controlling blowing ash challenging— if not impossible.

The experience that residents of Uniontown, Alabama have had with TVA's coal ash in their landfill foreshadow what will be visited on North Carolina communities if Duke Energy is allowed to take their problems to someone else's backyard.

From the BREDL technical report “Coal Ash Disposition-The Alternative for North Carolina”:

With the arrival of coal ash, the situation in Uniontown deteriorated. Residents living near the waste dump reported a noxious, nauseating smell from coal ash waste. Also, they reported fugitive ash dust covering their homes and automobiles.

The inherent injustice of transporting toxic waste from the largely white community in Roane County, Tennessee to a majority black community is currently the subject of a Civil Rights lawsuit brought by Earthjustice and a local attorney.

Blue Ridge Environmental Defense League proposes a safer solution which will isolate the ash from ground and surface water, the air, and the soil. This solution will also keep the liability where it belongs, with Duke Energy.

Contact Governor Pat McCrory today and tell him not to dump coal ash on our communities!

Governor Pat McCrory:
Phone: (919) 814-2000
Email: governorsoffice@nc.gov
Twitter: @PatMcCroryNC


NC County Says Don’t Dump on Us!

By Louis A. Zeller

On June 16, 2014 the Person County Board of Commissioners approved a landmark resolution calling for a halt to dumping ash, the toxic byproduct of coal-fired power, in ordinary landfills. The resolution neatly outlines the issue and provides a model for all communities with municipal waste dumps. Commissioner Frances Blalock, who led the move to pass the measure, said, “This resolution asks that no coal ash from Duke Energy lagoons and ponds be brought to the Person County landfill, thereby, transferring environmental and health problems to the citizens. It is a request for them to retain the ash on their property.”

Weeks of discussion preceded the commission’s unanimous vote, prompted by Duke Energy’s coal ash disaster on the Dan River in February and the subsequent shipment of coal ash from the spill to Person County's Upper Piedmont Landfill operated by Republic Services. Ms. Blalock is also a long-time member of the Person County BREDL chapter, People Rising In Defense of Ecology, PC PRIDE. Leading up to the vote, the group ran radio ads on a major daytime talk show station in Raleigh. One ad stated,

"Who should be liable for Duke’s coal ash spill? Duke, or the people of Person County? In a landfill, all wastes are considered equal. But, compared to soil, coal ash can have twice the mercury, 8 times more lead, and 20 times more arsenic. When the landfill leaks, and they all do, the people and the businesses of Person County will be left holding the bag. Tell our county commissioners that this liability transfer scheme is just not fair. Paid for by Person County PRIDE."

The Person County resolution also anticipates the long-awaited rulemaking on coal ash management by the US Environmental Protection Agency. The agency is to publish its final rule in December. The resolution states:

"Notwithstanding that action is underway at Dan River, be it resolved, that no additional coal combustion waste be placed in the Person County municipal solid landfill following the extant cleanup in the Dan River by Duke Energy and no movement of coal ash from coal ash ponds and lagoons near waterways be brought to the same municipal waste landfill. Regardless of the EPA ruling in December, all future remediation of coal ash waste disposal shall be the responsibility of the producer on their own property."

Although some advocate hauling the toxic ash from plant sites to double-lined landfills, the League has shown that landfilling endangers public health and the environment. Keeping the ash, and the liability for it, on power company property is one of the main goals of the Blue Ridge Environmental Defense League's campaign on coal ash pollution.
Electric power plants are water hogs. Whether they are coal-fired, biomass-burning or nuclear-powered, they all heat water to make steam to run a generator, a technology invented in the 1880’s. This heat source-steam generator power system—known as thermoelectric power—is the largest water user in the United States, bar none. ¹ The numbers are astronomical.

Nationwide, the United States Environmental Protection Agency lists 670 thermoelectric power plants. Water withdrawal for these plants is 143 billion gallons of fresh water per day.

Sport drink bottles filled with this much water would stretch from earth to the moon 510 times. This water use takes place every day, seven days a week, 52 weeks a year. And this counts only inland plants located on rivers and lakes. Power plants located on the coast withdraw 58 billion gallons of salt water daily. ²

Together, the water bottles would extend 171 million miles, nearly to the sun and back.


Let’s look at a single plant. A nuclear power plant of the latest design, the Westinghouse AP1000, requires more than fifteen times the EPA’s benchmark of two million gallons/day for cooling purposes. What would be the local impact? Two new AP1000 reactors are slated for the Plant Vogtle nuclear power station located in Burke County, Georgia, to be built alongside of two existing reactors built in the 1980’s. Presently, the county’s total water use is 83 million gallons per day, but most of the water is used by Plant Vogtle. Eliminate Vogtle and Burke County’s water needs for everything else—public water supply, commercial, industrial, and agricultural uses combined—averages only 18 million gallons per day. Vogtle is a huge water hog.

Among Georgia’s 159 counties, rural Burke County ranks number 12 in highest total water use, just behind Dekalb County in Atlanta. But Dekalb County’s population is 677,959 and Burke County’s population is 23,299. What is the difference? Does a family in Atlanta use twenty-nine times more water than a Burke County family? No, the difference is that Burke County has a nuclear power plant. And now Southern Company wants to nearly double its water use by adding two more nuclear plants. Burke County’s situation is reflected across Georgia. The state’s water use is approximately 5.5 billion gallons per day. The US Geological Survey estimates that thermo-electric-power water use in Georgia is about 2.7 billion gallons per day. Statewide, half of all available water is used to generate electric power by thermoelectric coal and nuclear power plants.
The Stanback Internship Program is made possible by the generous support of Mr. & Mrs. Fred Stanback. The program is a partnership between the Nicholas School and targeted environmental organizations. The purpose of the program is to provide students with significant work experience in grassroots conservation, advocacy, applied resource management or environmental policy. This summer, the League is honored to host four dedicated and passionate student interns from the Stanback program at Duke University, in Durham, NC.

**Shengyuan Su**

I am currently a BREDL 2014 summer intern in the program *Fracking 911*, and a graduate student in Nicholas School of the Environment of Duke University concentrating on the program of Environment Economics and Policy. I am from China, majoring in Environmental Science in undergraduate school and Accounting as a second bachelor’s degree. I previously was a research assistant specializing in Energy Efficiency, Land Utilization Efficiency, Urban Planning and Environmental Policy in Fudan University, Shanghai, and worked as a winter intern in the Audit Department of KPMG, Shanghai. In my spare time, I enjoy travelling, photography, reading and playing the piano. As a student who is always in the pursuit of environmental justice, joining in Blue Ridge Environmental Defense League provides me with an opportunity to dig more and have a better understanding in energy policy issues, and I am very pleased to work with the talented staff of BREDL.

**Wenhan Qiu**

I am a Master of Engineering candidate on Environmental Engineering at Duke University. I am truly excited to have the chance to participate in BREDL to strive for North Carolina’s sustainable future this summer. Currently I am in the Stanback internship program of *Energy and Public Health in the Law*. In my spare time, I enjoy cooking and traveling.

**Vaidehi Bachoti**

I am a graduate student at Duke University, Durham, NC, pursuing Masters in Mechanical Engineering. I am currently the “Fracking waste investigator” Stanback intern for BREDL. I am greatly excited and honored to have this opportunity to actively make a difference in the communities of North Carolina and work to protect and preserve the environment. I love art and I sketch and paint whenever I have some time to spare. I also enjoy music, reading and playing racquetball and tennis.

**Ye Ma**

I am currently a master candidate of the master of Engineering Management Program at Duke University. This summer I am a BREDL intern for the project Clean Water, Clean Energy In the Southeast U.S. I am from Shenzhen, China and I got my bachelor degree in Electrical Engineering at Penn State University in 2013. I also studied in Budapest, Hungary in the Corvinus University of Budapest during Summer 2012. I am a sports fan and I really love football, soccer and basketball.
CHAPTER UPDATE:

We had an interesting and productive BEST/MATRR annual meeting in Scottsboro on June 21st June. We were fortunate to have the knowledge and wisdom of Dave Lochbaum in attendance at the meeting. Dave is director of the Union of Concerned Scientists Nuclear Safety Project, and one of the nation’s top independent experts on nuclear power.

Garry, our Radiation Monitoring Project Director, demonstrated how he uses the Radionuclide Analyzer to determine which specific contaminants are being found in our area. He also shared his research on the sources, prodigies, etc. for each radionuclide found. In addition, Garry showed how his new Safecast b-Geigie maps our monitoring, and how the geiger counter software records varying levels of radioactivity in real time online.

Garry described the three phases of our monitoring project:
Phase I - Area screening, monitoring with geiger counter, and mapping test sites
Phase II - Identify hot spots with high CPMs, record specific radionuclide identification and concentration levels
Phase III - Commission professional environmental testing for legal verification, if needed.

Present members voted to only continue Phase I of the Monitoring Project until the end of August when the east Tennessee Report is scheduled for completion. Present members also voted to continue east Tennessee report to completion.

Dave Lochbaum made the point that our published reports not only draw in more members, but also increase our funding. He also made the observation that our Browns Ferry report validated the lessons of Fukushima showing that radiation travels further than the 10 mile emergency zone.

Garry talked about current and proposed projects, which would be dependent on acquiring funding. There was a lengthy discussion about our mission, about our need for more active members, and about the possibility of hosting a recreational event along with our next meeting.

Gail Vaughn's proposal to put nuclear power plants on real-time USGS Earthquake Maps was accepted as a part of the Make Radiation Visible campaign. We will send a sign-on letter around later this summer.

We celebrated the victory of the first known incidence of a nuclear power plant being on a TV radar weather map during tornado events. When the last stampede of tornados swept past Browns Ferry in late April 2014, WHNT Channel 19 TV in Huntsville broadcast with the Browns Ferry Nuclear Plant on its live tornado watch reporting.

Dave Lochbaum attended the meeting at our invitation and presented us with Draft copies of his upcoming paper on "Routine Releases of Radioactive Materials from Nuclear Power Plants," which focuses on Browns Ferry as an example for Boiling Water Reactors and Sequoyah for Pressurized Water Reactors. It is a highly informative and exciting source of information for our area, and we are grateful for his knowledge and expertise.

There was a discussion about the Make Radiation Visible logo, which needs to be accompanied by the website address, www.MakeRadiationVisible.org.

Gretel gave a short briefing on the three main methods proposed, so the group would be able to explain the proposals accurately:
1. Dye (or Dyed Smoke) Dispersals with Emergency Releases
2. Alerts Posted Online when Batch or Unscheduled Releases Occur
3. Multi-agency National Radiation Monitoring Network in Real-time Online

Our new MATRR.org Online Calendar (http://matrrcalendar.blogspot.com) is updated bi-monthly. Please note that the NRC is holding meetings on the Sequoyah Nuclear Plant relicensing every Wednesday during the month of July, from 1-2:30 EST (12-1:30 Central). Just click on an event for details.

Gretel Johnston
Vice-President/Secretary
BREDL/BEST/MATRR
http://www.matr.org

(GARRY MORGAN, Treasurer)
Awards $60,000 Grant

Through the generous contributions of the Z. Smith Reynolds Foundation, BREDL’s commitment to environmental democracy in North Carolina will continue into 2015. In May, the Foundation generously awarded BREDL $60,000 in general operating support for our environmental work in North Carolina this year, and into the next.

Z. Smith Reynolds, a 76-year-old private foundation based in Winston-Salem, NC, supports work five focus areas: public education, community-based economic development, strengthening democracy, and promoting racial and gender equity. Their mission states, “The Z. Smith Reynolds Foundation (ZSR) is committed to improving the quality of life of all North Carolinians. ZSR invests in statewide, regional and community-based organizations that are dedicated to building an inclusive, sustainable and vibrant State. The groups that ZSR supports both work to build healthy, robust communities at the local and regional level and engage in education, civic dialogue and advocacy around issues of importance to communities and to North Carolina.

Our NC campaigns focus on energy production and the protection of natural resources. One of our main target issues in NC is to prevent hydrofracking and protect communities that are at risk from the destructive and unnecessary extraction of natural gas, which is a detour on the way to clean energy. In the Triassic Basin, we will hold a series of strategy meetings to strengthen the diverse communities in the directly affected areas and organize a regional campaign to prevent themselves from fracking speculators and energy developers. In addition to our piedmont groups, we will organize groups in mountain and coastal communities faced with either waste disposal or exploration for natural gas. Our campaign to prevent fracking will become statewide.

People of color bear disproportionate impacts from pollution. To further public participation and local control, we will work with community groups to remove racial barriers and broaden the base of activated people working together.

Groundwater pollution is a persistent problem at scores of landfills. With support from the Z. Smith Reynolds Foundation, we will continue to prevent the siting of mega-dumps and work with communities living with leaking landfills.”
Awards $25,000
Grant

In April, BREDL was awarded $25,000 by the New World Foundation for our No Toxic Trespass-No Fracking Way! program.

This is our first grant from New World, and we are grateful for the opportunity to work together to prevent hydrofracking in North Carolina.

New World is a national community foundation that works “from the bottom up to build coalitions around issues that converge in place, creating alliances locally and building movements nationally”

“Rooted in a long tradition of advancing an ever-expanding view of civil rights in America, the New World Foundation strengthens community-based organizations and local leadership” (newwf.org). 

The strategic grassroots approach of the New World Foundation is helping to build power in communities in danger of being fracking in North Carolina.

The No Toxic Trespass-No Fracking Way! program reinforces BREDL’s commitment to protect communities in the Triassic shale basin and across the state, building on our accomplishments. In addition to organizing new communities across the state, our strategy includes holding a grassroots citizen’s conference on fracking and creating a landowners’ bill of rights to empower the grassroots. The strongest element of the campaign may well be the mobilization of property owners who may face seismic testing and drilling against their will due to the legal loopholes created by forced pooling and split estates. BREDL expects that our chapters will be working on the fracking campaign beyond the first grant cycle, into 2015.

As Community Organizer, Therese Vick says, “we only have to last one day longer than they do.”

Awards $15,000
Grant

In June, the Park Foundation pledged a $15,000 grant for BREDL’s campaign, Blistering the Air, which bolsters our campaign to end the reckless waste disposal by coal-fired power plants, polluting the air, fouling the rivers and contaminating communities with coal ash.

The Park Foundation was established in 1966 by the late Roy Hampton Park, Sr.—founder, chairman, and chief executive officer of Park Communications, Inc. “The Foundation is dedicated to the aid and support of education, public broadcasting, environment, and other selected areas of interest The Park Foundation's interest in environmental causes has recently been refined to focus on issues of freshwater, particularly in the eastern United States

With the generous support of the Park Foundation, our goal for Blistering the Air is the safe storage of coal ash at power plant sites, isolated from air, ground- and surface water contamination, and protection for those communities living near hazardous or municipal landfills.
The Save Linville Gorge Wilderness Chapter has several initiatives underway. We are continuing to oppose prescribed burning of the Linville Gorge Wilderness through the 15 Year Pisgah-Nantahala Forest Land Use Management Plan Update. We submitted scoping comments opposing prescribed burning and fracking in these forests and wrote in support of expansion of the Linville Gorge Wilderness on two tracts of land totaling approximately 9,000 acres.

The Save Linville Gorge Wilderness chapter is currently in the process of preparing for several air quality sampling events to get some experience under our belts in our new bucket brigade program. One test will be at the lower Linville Gorge Wilderness Area near a pollution site and another at the upper Linville Gorge Wilderness Area to get a clean air benchmark. The Gorge was afforded a Class I air quality protection by the 1964 Wilderness Act. The Class I designation’s intent is to protect the view shed by managing particulates emitted in the area. In addition prescribed burning produces significant health hazards due to high level emissions of formaldehyde, benzene, carbon monoxide, acrolein and the other hazardous byproducts of prescribed burning. The air sampling will provide data to establish levels of prescribed fire emissions that violate federal and state air quality standards. This data will also be used to ensure public awareness of the health issues.

A new recent chapter initiative began in early June when area residents, called on Sue and Lonnie to help them to organize and oppose a North Carolina Wildlife Resources proposal to build an outdoor shooting range 1.2 miles from the Gorge and next to Lake James. Concerns include sound disturbances at residences and in the wilderness, stray shots endangering the public and lead contamination. Lake James is also the source of public water supplies for the area. Lonnie built a Facebook site to enable networking and created a petition on Change.org to collect signatures and contact information for additional action. The NC Wildlife Resource Commissioner receives an email notification for each of the signatures applied to the petition. A total of 371 signatures were collected in the first 15 days, and the petition now has over 500 signatures. The Facebook site continues to be shared among local residents on this site to develop strategies and facilitate collaboration. The petition is available on the Change.org website at http://chn.ge/1qw4SMa or search for “NC Wildlife Resources Commissioners withdraw the proposal to build a shooting range on the Linville tract of the Pisgah game land in Burke County.”

The Wildlife Resources Commission held a public meeting on June 19th to get public input on the proposed project before a Wildlife Resources Commission committee in Raleigh makes a decision on the current proposal on August 27th. About 60 people attended. An equal number of citizens opposing and supporting the gun range spoke. The supporters presented personal reasons for wanting the range located at this site. The meeting was covered by the McDowell News.

In attendance at the meeting were BREDL Save Linville Gorge Wilderness chapter members Daisy and Elizabeth O’Nan and Sue and Lonnie Crotts. Sue read and presented the opposing petition with signatures and comments. Lonnie addressed soundscape impacts for locals and the Gorge and the lack of law enforcement against people who shoot illegally on game lands. Daisy and Elizabeth spoke most eloquently about toxic lead waste and dust from ammunition. Upon questioning by the O’Nans, the Wildlife Resources Commission staff stated that they did not currently have a plan for lead remediation but they know it can be very expensive. The North Carolina Water Resources Commission acknowledged that there are shooting range sites that have also become superfund sites, but said that was because they were poorly managed. We were not comforted by this information!

After the meeting Sue and Lonnie collaborated with local residents to prepare a draft resolution for the Burke County Commissioners to request the North Carolina Wildlife Commission to withdraw the shooting range proposal. A small group of local residents are meeting with County Commissioners at their agenda workshop on July 1st to work to get this on the Commissioners July 15th agenda. Whether or not the Commissioners decide to put this on the agenda, citizens will request this action at the July 15th meeting.

In the process of working with the local community on this issue we learned a great deal about environmental impacts of shooting ranges, including lead hazards creating superfund sites, that remediation is costly, and has limited results. When ammunition is fired the lead is atomized as dust, which then spreads readily to contaminate air and ground water. Lead has been banned in paint, toys, and other consumer products. Why the ammunition industry has not been required to substitute lead with another metal such as copper is a very good question. After the meeting Sue asked the regional manager of the Wildlife Resources Commission why they don’t build a state of the art indoor shooting range to resolve pollution issues. He replied that the lead dust is too hazardous for the shooters and employees operating the facility.

The Wildlife Resources Commission plans to build nine new shooting ranges across the state with a surplus of excise tax funds they receive from ammunition sales. The National Rifle Association is also making financial contributions to these facilities. If your community is in a rural area near federal game lands that the State manages, you may want to keep a lookout for new shooting range proposals and how they can impact the surrounding environment.
There is an unwelcome mission to import waste from Germany to SRS. With the existing stockpile of waste already in place for long-term storage, this would be outrageous. If the United States can’t find a place to store its own waste, why even consider a proposal to bring in additional deadly waste from Germany? I can assure you it’s not because the United States just wants to be a good neighbor to Germany. The motivating factor is the One Billion Dollars, put up by Germany for this project. Citizens are being told that the technology needed to process and store the deadly waste is not available in Germany but is available at SRS. If it is the desire of the United States to be a good neighbor, then let’s give them the needed technology or even sell them the technology. After all, it is said, “if a man is hungry and desires a fish, it is better to teach him how to fish that he may be able to feed himself.”

Therefore let us teach them the technology, so they can handle their own waste.

The residents in the surrounding counties both in South Carolina and Georgia cannot afford an additional environmental insult on their health. They are already heavily impacted with environmental injustice issues, being bombarded with disproportional contamination from both SRS and Plant Vogtle. We have cancer rates well above the national average. To receive Germany’s waste would be opening the door to all our transatlantic neighbors to send their unwanted high-level waste to SRS.

Blue Ridge Environmental Defense League has taken a stand to support the residents and the Savannah River Site Citizens Advisory Board on their resolution for not receiving any additional waste at the site. Therefore, we will continue to keep a watchful eye out to make sure that the silenced voices of the residents will not be taken as consent. Despite any amount of money that is thrown at this project, or any Plutonium Fuel Factory project, the residents do not accept it. There is enough waste already on site waiting to be processed with nowhere to go. We do not need additional waste from other countries.
Interview Reflection in Lee County,
By Intern Shengyuan Su

As one of the potential Hydraulic Fracturing drilling sites in North Carolina when the State government formulates regulations and passes legislations to allow the entry of oil and gas industry, Lee County is controversial primarily due to the Split Estate and Forced Pooling problems in the north western parts of the county.

Because of the separated surface property right and underground mineral right, landowners and residents cannot defend their property rights when they refused to lease their land to drilling companies, because they do not “own” the subsurface minerals, gas and other natural resources, which means they do not have the mineral rights of exploration or exploitation. For private landowners, however, if their neighborhoods agree to lease their lands to drilling companies, they will be forced or “compulsory” to join the lease. Then what if fracking activities affect their normal life? What if the fracking wasted water pollutes the drinking water? What if emergency like explosion happens with residents and workers seriously injured? They will not be allowed to resist on these potential risks brought by the coming oil and gas industry, because they only own the “surface” of their land.

Lead by the local community representatives and residents living on the split estate in Lee County, we visit the Camelback Bridge in Deep River Park and talk about their thoughts about hydraulic fracturing in the county and their rights to protect their property and environment. During the interview, not only their fears and concerns about fracking are justified, but also their strong emotions connected to their homeland are revealed.
Ramona Lawson, who is 85 years old and lives most of her life in Lee County, says that drilling activities on the split estate is “unethical” and “immoral” for residents and local community, and decision makers in North Carolina pass the legislation “too fast” even with fracking regulations prepared by MEC. And she argues that the beautiful environment in Lee County should also be kept for her children and grandchildren.

Representing Environmental Lee and her community, Debby Hall expresses her feeling of being threatened, fearful, and violated by narrating the tragic story of her grandfather’s brother, who was killed in one of the three coal mine explosion disasters in Lee County in May, 1925. “The explosion caused 40 widows and 75 orphans left”, she says with strong grief. She worries that the reentry of oil and gas industry in NC will lead to the same tragedy, which will jeopardize the peaceful life of people in Lee County. In the interview, she also says that during the last two years, her neighborhoods and she did not know anything about their mineral rights. It is too late for them to know that they do not own their mineral rights, and all of their lands are split estate. “We do not know who paid the tax of underground mineral in the past few years”, “I don’t think the decision makers have protected neighborhoods in split estates”, she says. At present, she is organizing her community to educate themselves on the legislature development of hydraulic fracturing, protect the neighborhood, and concern the whole state. “With increased traffic and explosions, potential risks are here for us”.

Besides the environmental justice and property rights, Ed Harris, who owns 20 acres of woodland in the Lee County and always goes fishing in Deep River, puts forward another focusing issue that could be brought by fracking on the split estate. He thinks it is unfair that the landowner of the split estate could be responsible for the safety of the drilling workers.

From Senate Bill 820: (b1) Persons Entering Land; Identification Required; Presumption of Proper Protection While on Surface Owners’ Property. – Persons who enter land on behalf of an oil or gas developer or operator for oil and gas operations shall carry on their person identification sufficient to identify themselves and their employer or principal and shall present the identification to the surface owner upon request. Entry upon land by such a person creates a rebuttable presumption that the surface owner properly protected the person against personal injury or property damage while the person was on the land.

“The decision makers did not protect our personal rights”. He says. Standing besides the Deep River, he expresses concern when talking about the water problem. “There used to be much larger volume of water, but look at the river now”. What he worries about is how the largely reduced water supplies the tremendous water usage in fracking activities. And he deeply doubts the role that Pat McCrory, who is the governor signing the Energy Modernization Act of North Carolina, plays in the decision making process. “Is he only working for the gas and oil industry?”, he asks.

Diana cultivates herself on hydraulic fracturing by attending the public hearing of North Carolina Department of Natural Resources and involving the regulatory process of Senate Bill 820, which was enacted by Mining and Energy Commission. Also, she participates in the 4th study group meeting discussing the topics of fracking financing and compulsory pooling. She thinks that despite the serious investigation, the current rules are still not adequate because “this is not a safe industry”. One of the most important problems she mentioned is that “only state government can make rules”, the local government was taken out of the process. Therefore, she proposes that we should change the legislature from the local level, and “fight back”.

Generally speaking, all the four interviewees argue that hydraulic fracturing will violate their property rights and threaten the environment and public health in Lee County, and they do not feel protected by the rules made by the State. Their persuasive, organized and touching speech not only represents the desire of vast local communities, but also can and will increase more North Carolinian’s awareness of learning and engaging in the development of fracking in North Carolina.

Photo at right highlights Camelback Bridge in Deep River Park in Lee County.

Lee County is one of the potential Hydraulic Fracturing drilling sites in North Carolina.
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